

**REMARKS****I. Response to Rejections Under 35 U.S.C. § 103**

Examiner has rejected claims 1-28 under 35 U.S.C. § 103(a) as being unpatentable over Kawabe et al. (U.S. Patent No. 6,166,722, "Kawabe") in view of Yong (U.S. Patent No. 6,088,021, "Yong"). With respect to claims 5-8, 15, 17, and 21-23 of the present application, Applicants have canceled these claims, thereby making moot the rejection as related to these claims. This rejection is respectfully traversed with regard to claims 1-4, 9-14, 16, 18-20, and 24-28 since neither of the cited references, taken either individually, or in combination therewith, teach, suggest, or mention the claimed invention.

In regards to claims 1 and 24 Kawabe does not disclose, teach, or suggest " a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device," as it is disclosed, defined, and claimed, in amended independent claims 1 and 24, by the Applicants in the instant specification. Kawabe discloses, "[t]he pointing device 40 is electrically connected to the apparatus main body 44 by means of a cable 52 having a predetermined length." Col. 6, lines 35-37. Kawabe further discloses, "[t]he cable 52 is preferably wound in the apparatus main body 44 by means of a cable winding device (not shown) when the pointing device 40 is stored in the storage section 46." Col. 6, lines 50-53. Thus, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable.

Yong teaches, "[t]he body 300 may include a reel assembly 314 capable of alternately extending and retracting the cord 316 between a fully extended length and a fully retracted length (see FIG. 2). The reel assembly 314 preferably comprises a frame or housing 318 disposed within housing 302 of the body 300." Col. 5, lines 57-61. Yong also teaches, "[a] rotatable ball 310 may extend from the bottom surface 306 for contacting a work surface . . . whereupon movement of the body 300 across the work surface induces rotation of the ball 310. Electronic encoders (not shown)

sense rotation of the ball 310, and generate a signal indicative of the ball's rotation to control movement of a cursor in the display area of the computer's display." Thus, Yong teaches a tracking device (i.e. the ball 310 and encoders (not shown)) disposed within body 300 of the pointing device and a reel assembly 314 having a frame or housing 318 separating reel assembly 314 from the tracking device (see Figs. 3a and 3b).

Yong is silent on a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach the present invention as recited in amended independent claims 1 and 24. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended independent claim 25 Kawabe does not disclose, teach, or suggest " an optical tracking device having at least one optical component disposed within the cable receiver, the optical tracking device including a sensor, a lens, and a light source, wherein the tracking device generates signals based on movement of the pointing device, the signals controlling movement of a reference on the display," as it is disclosed, defined, and claimed, in amended independent claim 25, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable, and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. Both Kawabe and Yong are silent on " an optical tracking device having at least one optical component disposed within the cable receiver." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach the present invention as recited in amended independent claims 25. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to independent claim 26 Kawabe does not disclose, teach or suggest " an optomechanical tracking device, [including] a mechanical motion transfer

mechanism, and a rotatable control circuit having at least one transducer disposed on the cable receiver converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," as it is disclosed, defined, and claimed, in amended independent claim 25, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable, and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. Both Kawabe and Yong are silent on "an optomechanical tracking device, [including] a mechanical motion transfer mechanism, and a rotatable control circuit *having at least one transducer disposed on the cable receiver* converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing." Emphasis added. Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach the present invention as recited in amended independent claim 26. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended independent claim 27 and dependent claim 28, which depends on independent claim 27, Kawabe does not disclose, teach or suggest a method for storing a cable in a pointing device housing including "*opening a lid disposed on the housing* of the pointing device; providing access to a rotatable disk attached to the cable receiver; [and] *rotating the rotatable disk to wind the cable* around the cable receiver," as it is disclosed, defined, and claimed, in amended independent claim 27, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable, and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. Neither Kawabe nor Yong disclose, teach or suggest a pointing device having a housing with a lid disposed thereon providing access to a rotatable disk to wind the cable. Both Kawabe and Yong are silent on a method for storing a cable in a pointing device housing including *opening a lid disposed on the housing* of the pointing device; providing access to a rotatable disk attached to the cable receiver; [and] *rotating the*

*rotatable disk to wind the cable* around the cable receiver." Emphasis added. In addition both Kawabe and Yong are silent on "inserting a stylus into an aperture and rotating the rotatable disk to wind the cable around the cable receiver," as disclosed, defined, and claimed, in dependent claim 28. Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach the present invention as recited in amended independent claims 27 and dependent claim 28. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to dependent claims 2, 3, and 11, dependent claims 2, 3 and 11 are dependent upon independent claim 1, and are therefore believed to be allowable as dependent upon a believed allowable claim. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claim 4, dependent claim 4 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a switch including "a link having a conductor portion capacitively coupled to the cable receiver," as it is disclosed, defined, and claimed, in amended dependent claim 4, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable, and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. Yong does disclose "[o]ne or more depressible keys 210 may be disposed on the upper surface at the front of the body 208. These keys 210 may be depressed by a user to input commands into the computer." Beginning at Col. 4 line 67; also *see* Col. 5, lines 42-43. However, neither Kawabe nor Yong disclose, teach or suggest a pointing device having a switch including "a link having a conductor portion capacitively coupled to the cable receiver." Both Kawabe and Yong are silent on "a switch including "a link having a conductor portion capacitively coupled to the cable receiver." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach the present invention as recited in amended dependent claim 4. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claim 9, dependent claim 9 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device including "an optical tracking device including a sensor, a lens, and a light source, wherein the optical tracking device optically tracks movement of the pointing device," as it is disclosed, defined, and claimed, in amended dependent claim 9, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable. In addition, Kawabe discloses "[t]he operator of the electronic apparatus 10 can move a cursor displayed on said display 14 to select desired functions of the computer and carry out other operations by touching the sensor pad 16a with a finger tip." Col. 4, lines 25-29. As discussed above Yong teaches an optomechanical tracking device (i.e. the ball 310 and encoders (not shown) disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. However, neither Kawabe nor Yong disclose, teach or suggest a pointing device having a tracking device including "an optical tracking device including a sensor, a lens, and a light source, wherein the optical tracking device optically tracks movement of the pointing device." Both Kawabe and Yong are silent on a pointing device utilizing a tracking device having "an optical tracking device including a sensor, a lens, and a light source, wherein the optical tracking device optically tracks movement of the pointing device." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach the present invention as recited in amended dependent claim 9. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claim 10, dependent claim 10 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device having a reference stop surface and a detent, "the detent having a mating surface to the reference stop surface, wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in

proper alignment with the housing, and when the detent does not mate with the reference stop surface the tracking device is not in proper alignment with the housing," as it is disclosed, defined, and claimed, in amended dependent claim 10, by the Applicants in the instant specification." As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable; and Yong teaches an optomechanical tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. Neither Kawabe nor Yong disclose, teach or suggest a pointing device having "a tracking device having at least one component of the tracking device disposed on or within the cable receiver." Further, neither Kawabe nor Yong disclose teach or suggest a pointing device having a reference stop surface and a detent, "the detent having a mating surface to the reference stop surface, wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing, and when the detent does not mate with the reference stop surface the tracking device is not in proper alignment with the housing."

Since neither Kawabe nor Yong disclose, teach or suggest disposing tracking device components on or within the cable receiver, alignment of the tracking device is fixed relative to the housing, however, as in the instant case when the tracking device components are disposed on or within the rotatable cable receiver alignment may not be fixed, and thus, a reference may provide feedback of proper alignment. Both Kawabe and Yong are silent on a pointing device having "a tracking device having at least one component of the tracking device disposed on or within the cable receiver," and a reference stop surface and a detent, "the detent having a mating surface to the reference stop surface, wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing, and when the detent does not mate with the reference stop surface the tracking device is not in proper alignment with the housing." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach or suggest the present invention as recited in amended dependent claim 10. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claim 12, dependent claim 12 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device having "a lid having an open position providing access to the cable receiver and the lid having a closed position covering the cable receiver," as it is disclosed, defined, and claimed, in amended dependent claim 12, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable; and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. In addition, Yong discloses "[t]he reel assembly 314 preferably comprises a frame or housing 318 disposed within housing 302 of the body 300. The frame 318 may have an opening 320 coincident with an opening in the front of the housing 302 through which the cord 316 may extend." Col. 5, lines 60-64. Thus, Yong does not disclose, teach or suggest a pointing device having a lid that provides access to a cable receiver to wind and unwind the cable. Both Kawabe and Yong are silent on a pointing device having "a lid having an open position providing access to the cable receiver and the lid having a closed position covering the cable receiver." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach or suggest the present invention as recited in amended dependent claim 12. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claim 13, amended dependent claim 13 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device having "a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface further comprising: a depression formed in the exterior surface of the disk top, the depression having a diameter and adapted to accept a finger, and an aperture within the depression less than the diameter of the depression," as it is disclosed, defined, and claimed, in amended dependent claim 13, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-

winding device and a pointing device electrically connected to the computer via a cable; and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. In addition, Yong discloses "as the cord 316 is extended from the body 300, the shaft 330 is rotated by the spool 322 causing the spring 342 to tighten and store potential energy for retracting the cord 316 at a later time." Col. 6, lines 15-18. Thus, Yong teaches a reel assembly having a spring that winds and unwinds the cable, Yong does not disclose teach or suggest a pointing device having a rotatable disk having a depression adapted to accept a finger to wind the cable. Both Kawabe and Yong are silent on a pointing device having "a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface further comprising: a depression formed in the exterior surface of the disk top, the depression having a diameter and adapted to accept a finger, and an aperture within the depression less than the diameter of the depression." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach or suggest the present invention as recited in amended dependent claim 12. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claim 14, amended dependent claim 14 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device having "a connector receiver formed in the housing which accepts the connector," as it is disclosed, defined, and claimed, in amended dependent claim 14, by the Applicants in the instant specification." As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable; and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. In addition, Yong discloses "a connector 206 for coupling the body 208 of the input device 202 to the computer system." Col. 4, lines 63-64. Thus, Yong teaches a pointing device having a connector attached to a cable, Yong does not disclose teach or suggest a pointing device having "a connector receiver formed in the housing which accepts the connector." Both Kawabe and Yong are silent on a pointing device having "a



connector receiver formed in the housing which accepts the connector." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach or suggest the present invention as recited in amended dependent claim 14. Accordingly, the Applicants assert that the rejection has been overcome.

In regards to amended dependent claims 16, 18, and 19, amended dependent claims 16, 18, and 19 are dependent upon independent claim 1, and are therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device having a tracking device including " a mechanical motion transfer mechanism disposed in the housing; and a rotatable control circuit having at least one transducer disposed on or within the cable receiver, and converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing," as it is disclosed, defined, and claimed, in amended dependent claims 16, 18, and 19, by the Applicants in the instant specification. As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable; and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. In addition, Yong discloses, " [e]lectronic encoders (*not shown*) sense rotation of the ball 310, and generate a signal indicative of the ball's rotation to control movement of a cursor in the display area." Col. 5, lines 47-50. Thus, Yong teaches a conventional tracking device having integrated circuits mounted within the pointing device that accept the output signal of a transducer and convert that signal to a signal utilized by the computer. Yong does not disclose, teach, or suggest, "having at least one transducer disposed on or within the cable receiver." Even assuming, in arguendo, that the electronic encoders are transducers as claimed and taught in the instant case, Yong still does not disclose, teach, or suggest disposing the electronic encoders on or within the cable receiver. Both Kawabe and Yong are silent on a pointing device having a tracking device including " a mechanical motion transfer mechanism disposed in the housing; and a rotatable control circuit having at least one transducer disposed on or within the cable receiver." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does


not teach or suggest the present invention as recited in amended dependent claims 16, 18, and 19. Accordingly, the Applicants assert that the rejection has been overcome

In regards to dependent claim 20, dependent claim 20 is dependent upon independent claim 1, and is therefore believed to be allowable as dependent upon a believed allowable claim. In addition, Kawabe does not disclose, teach or suggest, a pointing device having "a rotatable disk mounted to the cable receiver; and a slot in the housing, wherein the rotatable disk protrudes through the slot," as it is disclosed, defined, and claimed, in dependent claim 20, by the Applicants in the instant specification." As discussed above, Kawabe teaches a computer having a cable-winding device and a pointing device electrically connected to the computer via a cable; and Yong teaches a tracking device disposed within a body of the pointing device and a reel assembly having a frame or housing separating the reel assembly from the tracking device. In addition, Yong discloses, "as the cord 316 is extended from the body 300, the shaft 330 is rotated by the spool 322 causing the spring 342 to tighten and store potential energy for retracting the cord 316 at a later time." Col. 6, lines 15-18. Thus, Yong teaches a reel assembly having a spring that winds and unwinds the cable, Yong does not disclose teach or suggest a pointing device having a rotatable disk protruding through a slot in the pointing device housing for winding and unwinding the cable. Both Kawabe and Yong are silent on a pointing device having " a rotatable disk mounted to the cable receiver; and a slot in the housing, wherein the rotatable disk protrudes through the slot." Thus, the Examiner's suggested combination (which may or may not be proper) of Kawabe and Yong does not teach or suggest the present invention as recited in dependent claim 20. Accordingly, the Applicants assert that the rejection has been overcome.

Therefore, in view of the foregoing Amendment and Remarks, Applicants believe the present application to be in a condition suitable for allowance. Examiner is respectfully urged to withdraw the rejections, reconsider the present Application in light of the foregoing Amendment, and pass the amended Application to allowance.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call applicant's representative at (541) 715-1694 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully Submitted,  
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## ATTACHMENT 1

1. (Amended) A pointing device capable of changing the appearance of a display, comprising:

a housing having a cover and a base;

a single spool cable receiver rotatably mounted to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver[.]; and

a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device, wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

3. (Amended) The pointing device of claim 1, further comprising a switch [which is activated] to generate a pointing signal to the display.

4. (Amended) The pointing device of claim 3, [further comprising a switch which is capacitively] wherein the switch further comprises a link having a conductor portion capacitively coupled to the cable receiver.

5. Please cancel claim 5.

6. Please cancel claim 6.

7. Please cancel claim 7.

8. Please cancel claim 8.

9. (Amended) The pointing device of claim [5]1, wherein the tracking device further comprises an optical [sensor] tracking device including a sensor, a lens, and a light source, [for optically monitoring] wherein the optical tracking device optically tracks movement of the pointing device.

10. (Amended) The pointing device of claim 1, further comprising:  
a reference stop surface disposed in the housing[,]; and  
a detent disposed in the housing, the detent having a mating surface to the reference stop surface, wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing, and when the detent does not mate with the reference stop surface the tracking device is not in proper alignment with the housing [aligns the cable receiver to the housing].

12. (Amended) The pointing device of claim 1, wherein the cover further comprises a lid having an open position providing access to the cable receiver [, wherein the lid is disposed in an open position when the cable is being wound around the cable receiver] and the lid [is disposed in] having a closed position [when] covering the cable receiver.

13. (Amended) The pointing device of claim [1]12, further comprising:  
a rotatable disk affixed to the cable receiver,[  
wherein the cover further comprises an opening in the cover and the rotatable disk is disposed within the opening in the cover;  
wherein] the rotatable disk [has]having a [rotatable] disk top including an exterior surface, further comprising:  
a depression formed in the exterior surface of the [rotatable] disk top,  
the depression having a diameter, and adapted to accept a finger[,]; and  
an aperture within the depression less than the diameter of the depression.

14. The pointing device of claim 1, further comprising:  
a connector attached to the cable at the first end[,]; and  
a connector receiver formed in the housing which accepts the connector.

15. Please cancel claim 15.

16. (Amended) The pointing device of claim 1, wherein the tracking device  
further [comprising]comprises:

[a rotatable control circuit mounted to the cable receiver for producing  
position signals in response to movement of the housing; and]

a [tracking] mechanical motion transfer mechanism disposed in the housing  
[coupled to the rotatable control circuit for generating signals in response to  
movement of the housing]; and

a rotatable control circuit having at least one transducer disposed on or within  
the cable receiver, and converting movement of the mechanical motion transfer  
mechanism into position signals in response to movement of the housing.

17. Please cancel claim 17.

18. (Amended) The pointing device of claim 16, wherein the rotatable control  
circuit further comprises[:

]first and second transducers [for receiving user commands indicating  
movement of the housing and producing]converting movement of the mechanical  
motion transfer mechanism into first and second position signals in response thereto.

19. (Amended) The pointing device of claim 18, wherein the[  
tracking]mechanical motion transfer mechanism further comprises:

a first wheel with a polygonal [outer]edge surface rotatably mounted relative  
to the housing; and

a second wheel rotatably mounted relative to the housing, wherein the first  
transducer is operably coupled to the first wheel producing [a]the first position signal  
and the second transducer is operably coupled to the second wheel producing [a]the

second position signal in response to rotation of the first and second wheels in response to movement of the housing.

21. Please cancel claim 21.

22. Please cancel claim 22.

23. Please cancel claim 23.

24. (Amended) A system, comprising:

a computer;

a display electrically coupled to the computer;[,] and

a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:

a housing having a cover and a base[;],

a single spool cable receiver rotatably mounted to the housing[;],

a cable having a first end and a second end with the second end mounted to the cable receiver, and

a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device, the signals controlling movement of a reference on the display;

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

25. (Amended) A system, comprising:

a computer;

a display coupled to the computer;[,] and

a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:

a housing having a cover and a base[;],  
a cable receiver [movably coupled] rotatably mounted to the housing[;],  
a cable having a first end and a second end with the second end mounted to the cable receiver[;], and  
[a tracking device disposed within the housing;  
a rotary connector coupling the cable to the tracking device,]  
an optical tracking device having at least one optical component disposed within the cable receiver, the optical tracking device including a sensor, a lens, and a light source, wherein the tracking device generates signals based on movement of the pointing device, the signals controlling movement of a reference on the display;  
wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wrapped around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

26. (Amended) A system, comprising:  
a computer;  
a display coupled to the computer[;], and  
a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:  
a housing having a cover and a base[;],  
a cable receiver [movably] rotatably coupled to the housing[;],  
a cable having a first end and a second end with the second end mounted to the cable receiver; and  
an optomechanical tracking device disposed in the housing, further comprising:  
[a rotatable control circuit for producing position signals in response to movement of the housing mounted to the cable receiver; and]  
a [tracking] mechanical motion transfer mechanism [for generating signals in response to movement of the housing disposed in the housing], and



a rotatable control circuit having at least one transducer disposed on the cable receiver converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing;

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wrapped around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

27. (Amended) A method for storing a cable with a connector in a pointing device housing containing a cable receiver with a connector receiver and the connector coupled to a computer, comprising the steps of:

disconnecting the cable from a computer;  
opening [the]a lid disposed on the housing of the pointing device;  
providing access to a rotatable disk attached to the cable receiver;  
rotating the rotatable disk to wind the cable around the cable receiver;  
inserting the connector into the connector receiver; and  
closing the lid.

29. (new) The pointing device of claim 10, wherein said detent further comprises an electrical switch.

30. (new) The pointing device of claim 19, wherein the polygonal edge surface further comprises n flat reflective surfaces, wherein n is greater than 20.

31. (new) The pointing device of claim 19, wherein the second wheel further comprises an encoder wheel having alternating reflective and non-reflective surfaces on a face surface of the encoder wheel.

32. (new) the pointing device of claim 19, wherein the first wheel operably couples to the first transducer utilizing reflected light and the second wheel operably couples to the second transducer utilizing reflected light.

33. (new) A pointing device capable of changing the appearance of a display comprising:

- a housing having a cover and a base;
- a single spool cable receiver rotatably mounted to the housing;
- a cable having a first end and a second end with the second end mounted to the cable receiver;
- a switch capacitively coupled to the cable receiver wherein the switch generates a pointing signal to the display;
- a detent wherein the detent aligns the cable receiver to the housing;
- a connector attached to the cable at the first end;
- a connector receiver formed in the housing which accepts the connector;
- a lid, wherein the lid is disposed in an open position when the cable is being wound around the cable receiver, and the lid is disposed in a closed position when covering the cable receiver;
- a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface further comprising:
  - a depression formed in the exterior surface of the disk top, the depression having a diameter, and
  - an aperture within the depression less than the diameter of the depression; and
- a tracking device mounted to the cable receiver, the tracking device having an optical sensor for generating signals based on movement of the pointing device, the signals controlling the movement of a reference on the display, wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

34. (new) A pointing device capable of changing the appearance of a display comprising:

- a housing having a cover having an opening and a base;
- a single spool cable receiver rotatably mounted to the housing;
- a cable having a first end and a second end with the second end mounted to the cable receiver;

- a switch capacitively coupled to the cable receiver wherein the switch generates a pointing signal to the display;

- a detent wherein the detent aligns the cable receiver to the housing;

- a connector attached to the cable at the first end;

- a connector receiver formed in the housing which accepts the connector;

- a rotatable disk affixed to the cable receiver, and disposed within the opening in the cover;

- a tracking device mounted to the cable receiver, comprising:

- a rotatable control circuit mounted to the cable receiver for producing position signals in response to movement of the housing, the rotatable control circuit having first and second transducers for receiving user commands indicating movement of the housing and producing first and second position signals in response thereto,

- a tracking mechanism disposed in the housing coupled to the rotatable control circuit for generating signals in response to movement of the housing, further comprising:

- a first wheel having a polygonal edge surface, the first wheel rotatably mounted to the housing, and

- a second wheel rotatably mounted relative to the housing, wherein the first transducer is operably coupled to the first wheel producing a first signal and the second transducer is operably coupled to the second wheel producing a second signal in response to rotation of the first and second wheels in response to movement of the housing;

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

## ATTACHMENT 2

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k. (Amended) A pointing device capable of changing the appearance of a display, comprising:  
a housing having a cover and a base;  
a single spool cable receiver rotatably mounted to the housing;  
a cable having a first end and a second end with the second end mounted to the cable receiver; and  
a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device, wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

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3. (Amended) The pointing device of claim 1, further comprising a switch to generate a pointing signal to the display.

4. (Amended) The pointing device of claim 3, wherein the switch further comprises a link having a conductor portion capacitively coupled to the cable receiver.

5. Please cancel claim 5.

6. Please cancel claim 6.

7. Please cancel claim 7.

8. Please cancel claim 8.

9. (Amended) The pointing device of claim 1, wherein the tracking device further comprises an optical tracking device including a sensor, a lens, and a light source, wherein the optical tracking device optically tracks movement of the pointing device.

10. (Amended) The pointing device of claim 1, further comprising:  
a reference stop surface disposed in the housing; and  
a detent disposed in the housing, the detent having a mating surface to the reference stop surface, wherein when the detent mates with the reference stop surface, providing tactile feedback, the tracking device is in proper alignment with the housing, and when the detent does not mate with the reference stop surface the tracking device is not in proper alignment with the housing.

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12. (Amended) The pointing device of claim 1, wherein the cover further comprises a lid having an open position providing access to the cable receiver and the lid having a closed position covering the cable receiver.

13. (Amended) The pointing device of claim 12, further comprising:  
a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface, further comprising:

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a depression formed in the exterior surface of the disk top, the depression having a diameter, and adapted to accept a finger, and  
an aperture within the depression less than the diameter of the depression.

14. The pointing device of claim 1, further comprising:  
a connector attached to the cable at the first end; and  
a connector receiver formed in the housing which accepts the connector.

15. Please cancel claim 15.

16. (Amended) The pointing device of claim 1, wherein the tracking device further comprises:

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a mechanical motion transfer mechanism disposed in the housing; and  
a rotatable control circuit having at least one transducer disposed on or within  
the cable receiver, and converting movement of the mechanical motion transfer  
mechanism into position signals in response to movement of the housing.

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17. Please cancel claim 17.

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18. (Amended) The pointing device of claim 16, wherein the rotatable control  
circuit further comprises first and second transducers converting movement of the  
mechanical motion transfer mechanism into first and second position signals in  
response thereto.

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19. (Amended) The pointing device of claim 18, wherein the mechanical  
motion transfer mechanism further comprises:

a first wheel with a polygonal edge surface rotatably mounted relative to the  
housing; and

a second wheel rotatably mounted relative to the housing, wherein the first  
transducer is operably coupled to the first wheel producing the first position signal  
and the second transducer is operably coupled to the second wheel producing the  
second position signal in response to rotation of the first and second wheels in  
response to movement of the housing.

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21. Please cancel claim 21.

22. Please cancel claim 22.

23. Please cancel claim 23.

24. (Amended) A system, comprising:  
a computer;  
a display electrically coupled to the computer; and  
a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:  
a housing having a cover and a base,  
a single spool cable receiver rotatably mounted to the housing,  
a cable having a first end and a second end with the second end mounted to the cable receiver, and  
a tracking device having at least one component of the tracking device disposed on or within the cable receiver, wherein the tracking device generates signals based on movement of the pointing device, the signals controlling movement of a reference on the display;  
wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

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25. (Amended) A system, comprising:  
a computer;  
a display coupled to the computer; and  
a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:  
a housing having a cover and a base,  
a cable receiver rotatably mounted to the housing,  
a cable having a first end and a second end with the second end mounted to the cable receiver, and  
an optical tracking device having at least one optical component disposed within the cable receiver, the optical tracking device including a sensor, a lens, and a light source, wherein the tracking device generates signals based on movement of the pointing device, the signals controlling movement of a reference on the display;

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wrapped around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

26. (Amended) A system, comprising:

a computer;

a display coupled to the computer; and

a pointing device, wherein the pointing device is capable of changing the appearance of a display, the pointing device further comprising:

a housing having a cover and a base,

a cable receiver rotatably coupled to the housing,

a cable having a first end and a second end with the second end mounted to the cable receiver; and

an optomechanical tracking device disposed in the housing, further comprising:

a mechanical motion transfer mechanism, and

a rotatable control circuit having at least one transducer disposed on the cable receiver converting movement of the mechanical motion transfer mechanism into position signals in response to movement of the housing;

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wrapped around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

27. (Amended) A method for storing a cable with a connector in a pointing device housing containing a cable receiver with a connector receiver and the connector coupled to a computer, comprising the steps of:

disconnecting the cable from a computer;

opening a lid disposed on the housing of the pointing device;

providing access to a rotatable disk attached to the cable receiver;

rotating the rotatable disk to wind the cable around the cable receiver;

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inserting the connector into the connector receiver; and  
closing the lid.

29. (new) The pointing device of claim 10, wherein said detent further comprises an electrical switch.

30. (new) The pointing device of claim 19, wherein the polygonal edge surface further comprises n flat reflective surfaces, wherein n is greater than 20.

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31. (new) The pointing device of claim 19, wherein the second wheel further comprises an encoder wheel having alternating reflective and non-reflective surfaces on a face surface of the encoder wheel.

32. (new) the pointing device of claim 19, wherein the first wheel operably couples to the first transducer utilizing reflected light and the second wheel operably couples to the second transducer utilizing reflected light.

33. (new) A pointing device capable of changing the appearance of a display comprising:

- a housing having a cover and a base;
- a single spool cable receiver rotatably mounted to the housing;
- a cable having a first end and a second end with the second end mounted to the cable receiver;
- a switch capacitively coupled to the cable receiver wherein the switch generates a pointing signal to the display;
- a detent wherein the detent aligns the cable receiver to the housing;
- a connector attached to the cable at the first end;
- a connector receiver formed in the housing which accepts the connector;
- a lid, wherein the lid is disposed in an open position when the cable is being wound around the cable receiver, and the lid is disposed in a closed position when covering the cable receiver;
- a rotatable disk affixed to the cable receiver, the rotatable disk having a disk top including an exterior surface further comprising:

a depression formed in the exterior surface of the disk top, the depression having a diameter, and

an aperture within the depression less than the diameter of the depression; and

a tracking device mounted to the cable receiver, the tracking device having an optical sensor for generating signals based on movement of the pointing device, the signals controlling the movement of a reference on the display, wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

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34. (new) A pointing device capable of changing the appearance of a display comprising:

a housing having a cover having an opening and a base;

a single spool cable receiver rotatably mounted to the housing;

a cable having a first end and a second end with the second end mounted to the cable receiver;

a switch capacitively coupled to the cable receiver wherein the switch generates a pointing signal to the display;

a detent wherein the detent aligns the cable receiver to the housing;

a connector attached to the cable at the first end;

a connector receiver formed in the housing which accepts the connector;

a rotatable disk affixed to the cable receiver, and disposed within the opening in the cover;

a tracking device mounted to the cable receiver, comprising:

a rotatable control circuit mounted to the cable receiver for producing position signals in response to movement of the housing, the rotatable control circuit having first and second transducers for receiving user commands indicating movement of the housing and producing first and second position signals in response thereto,

a tracking mechanism disposed in the housing coupled to the rotatable control circuit for generating signals in response to movement of the housing, further comprising:

a first wheel having a polygonal edge surface, the first wheel rotatably mounted to the housing, and

a second wheel rotatably mounted relative to the housing, wherein the first transducer is operably coupled to the first wheel producing a first signal and the second transducer is operably coupled to the second wheel producing a second signal in response to rotation of the first and second wheels in response to movement of the housing;

wherein the pointing device has a first mode with a first portion of the cable having a first length external to the pointing device and a second portion of the cable wound around the cable receiver; and a second mode with the first portion of the cable having a second length external to the pointing device less than the first length.

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